PARF: #59-2-268 Incumbent: Effective Date:

CALIFORNIA DEPARTMENT OF TRANSPORTATION DUTY STATEMENT

CLASSIFICATION TITLE	DISTRICT/DIVISION/OFFICE	
Transportation Engineering Technician	DES/GS/Office of Geotechnical Design West	
WORKING TITLE	POSITION NUMBER	EFFECTIVE
Transportation Engineering Technician	559-315-3175-001	12/01/11

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those we serve.

GENERAL STATEMENT:

Under the direction of a Senior Engineering Geologist the Transportation Engineering Technician (TET) is responsible for overseeing the collection of geotechnical instrumentation data and processing it with the use of computer, into a usable numerical and/or graphical format. In addition the TET installs monitors and maintains various Geotechnical instrumentation, analyzes data, prepares reports and maintains a Geotechnical database.

TYPICAL DUTIES:

Essential (E)/Marginal (M)1

Percentage

45% (E) Collect geotechnical monitoring data in the field. Install, configure, calibrate, troubleshoot, and maintain automated geotechnical monitoring sensors and testing equipment, which includes vibrating wire and open standpipe piezometers, settlement gauges, inclinometers, settlement platforms (pneumatic, fluid and riser types) tilt sensors

and plates, extensometers, load cells and crack gauges.

Job Description

40% (E) Process geotechnical monitoring data with the use of computers into a usable numerical or graphical format using DMM and Excel or other software. Analyze data for accuracy, reasonableness, and for signs of potential problems using DigiPro. Prepare reports on the results of geotechnical monitoring. Maintain a database of Geotechnical monitoring results.

- 5% (E) Setup, configure, upgrade, and maintain all computers used by the unit.
- 5% (E) Assist in the planning and layout of geotechnical instrumentation projects.
- 5% (E) Perform field pavement testing including coring and skid testing.

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SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

Supervision is not a requirement of this position but the incumbent may act as a leadworker.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS

- Knowledge of soil mechanics, laboratory testing, surveying and construction materials.
- Knowledge of California Testing methods and procedures.
- Knowledge of District and Translab organization and functions.
- The ability to write and prepare technical reports, analyze the work of others, and communicate effectively both orally and in writing on technical and non-technical matters.
- Knowledge of a variety of ground movement and groundwater monitoring instrumentation equipment used and the knowledge and ability to interpret the data.
- Writing Skills. The ability to compile data, analyze and then summarize. He/she must be able to determine the significance of the various data and make engineering judgments based on the data.
- Knowledge of and ability to use (or ability to learn to use) word processing, database, spreadsheet and various geotechnical software.
- The ability to communicate effectively, both orally and in writing, at a level required for successful job performance.

The incumbent must have good analytical skills, and be proficient in running spreadsheets and engineering programs on a computer, and must have the ability to apply basic engineering mathematics.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCE OF ERROR

Errors if not immediately recognized and corrected would result in increased construction or maintenance costs and would affect the safety of the traveling public.

PUBLIC AND INTERNAL CONTACTS

The incumbent will routinely contact other Caltrans personnel, most likely in the Division of Engineering Services, District Materials Laboratory, Construction, and occasionally contact personnel outside Caltrans concerning soils testing. These contacts will be verbal or written, as needed, to perform the assignment.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employees may be required to sit for long periods of time using a keyboard and video display terminal. They may also be required to move large or cumbersome plans, diagrams, and equipment from one location to another.

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WORK ENVIRONMENT

While at their base of operation, employees will work in a climate-controlled office under artificial lighting. Employees will also be required to travel and work outdoors the majority of the time and may be exposed to dirt, noise, uneven surfaces, poison oak, insects, and/or extreme heat or cold.

I have read, understand, and can perform accommodation, please discuss this with t	•	e you may require
Employee Name (please print)	Employee Signature	Date
I have discussed the duties with and provi	ded a copy of this duty statement to t	he employee named
Supervisor Name (please print)	Supervisor signature	Date